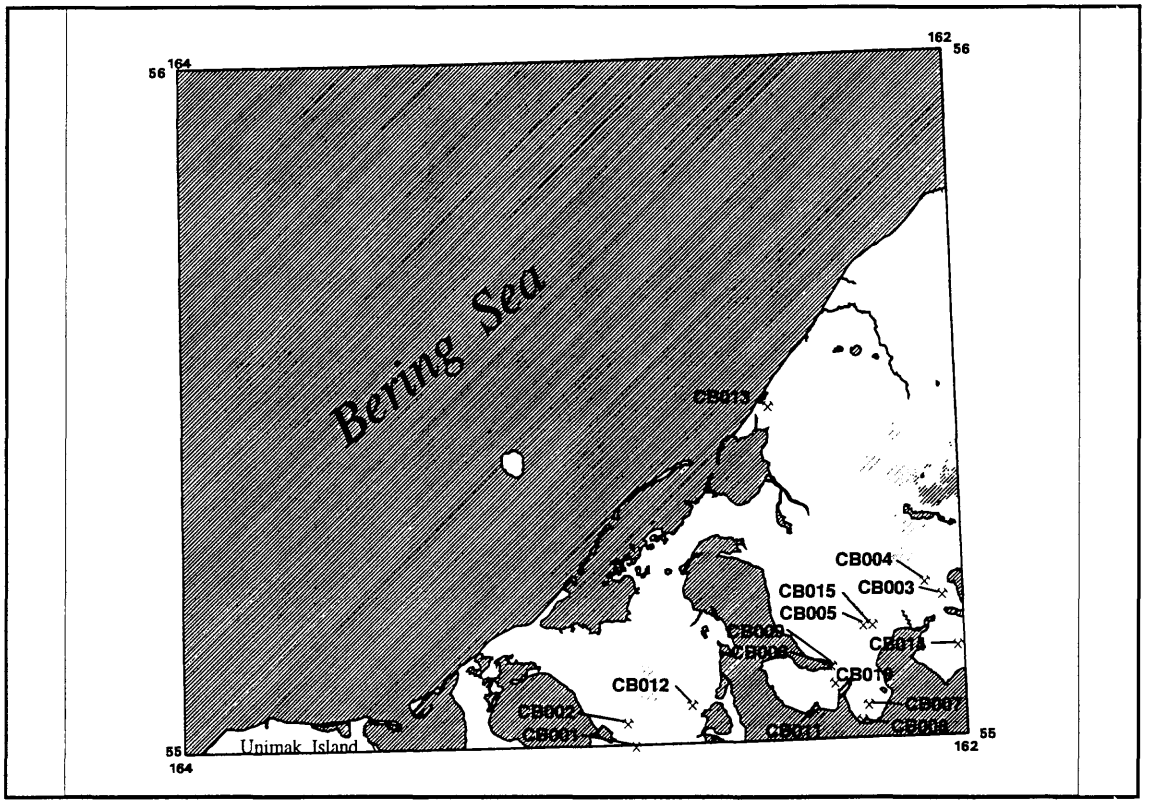
Alaska Resource Data File

U.S. Department of the Interior — U.S. Geological Survey.

Cold Bay quadrangle

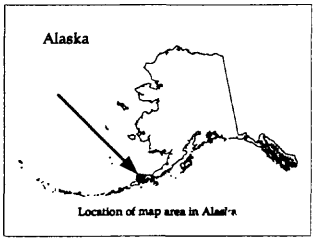
Description of the mineral occurrences shown on the accompanying figure follow. See U.S. Geological Survey (1996) for description of the information content of each field in the records. The data presented here are maintained as part of a statewide database on mines, prospects and mineral occurrences throughout Alaska.



Distribution of mineral occurrences in the Cold Bay 1:250,000-scale quadrangle, Alasla Peninsula, Alaska

This and related reports are accessible through the USGS World Wide Web site http://www-mrs-ak.wr.usgs.gov/ardf. Comments or information regarding corrections or missing data, or requests for digital retrievals should be directed to the author(s) of this compilation:

F.H. Wilson
U.S. Geological Survey
4200 University Dr.
Anchorage, AK 99508-4667
Voice: (907) 786-7448
e-mail: fwilson@usgs.gov



This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards or with the North American Stratigraphic Code. Any use of trade, product, or firm names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

OPEN-FILE REPORT 97-168

Site: Walrus Peak

Type: Prospect

ARDF no. CB001

Latitude: 55.00000 **Quadrangle:** CB A-3

Longitude: 162.84600

Location description and accuracy:
25 km southwest of Cold Bay (town), near Sand Cove Creek, 2.5 km northwest of Walrus Peak. Sec. 7, T. 60 S, R. 89 W. Extends into False Pass D-3 1:63,360-scale quadrangle; see FP004 in the False Pass quadrangle (Wilson, 1997).

Fox vein system dominates, extends 6.4 km, trending N50°E.

Commodities:
Main: Ag, Au, Pb, Zn **Other:** As, Cu, Hg, Sb

Ore minerals: Sphalerite, galena, tetrahedrite, pyrite

Gangue minerals: Barite, rhodonite, scorodite, quartz

Geologic description:
Color anomaly covering 23 square km in brecciated, silicified, and argillic altered andesite of Morzhovoi volcano. Many different sulfide-rich veins and zones of mineralization. Fox vein system dominates, extends 6.4 km, trending N50°E.

Alteration:
Silicification and argillic alteration of andesitic country rocks.

Workings/Exploration:
Geochemical sampling, 1:1,200, and 1:6,000 scale geologic mapping. Anomalous silver values (up to 100 ppm) in 44 of 133 samples; average 5.66 ppm. Anomalous gold in 58 of 133 samples; average 0.033 ppm, highest 0.36 ppm.

Age:
Quaternary

Deposit model:
Epithermal quartz-alunite gold

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992)
25e

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

References:
Butherus and others, 1979, 1981; Trujillo and others, 1982; MacKevett and Holloway, 1977

Primary reference: Trujillo and others, 1982

Reporter: Frederic Wilson

Reporter affiliation: USGS

Last report date: 6/29/88

Site: Littlejohn

Type: Occurrence

ARDF no. CB002

Latitude: 55.03400 **Quadrangle:** CB A-3

Longitude: 162.86500

Location description and accuracy:
Two miles east of Littlejohn Lagoon, north side of north fork of creek. Probably anomaly no. 63 of Christie (1974).

Commodities:
Main: Au, Hg **Other:** Ag, As

....gold to 5.6 ppm and silver to 33.2 ppm....

Ore minerals: Pyrite?

Gangue minerals: Quartz, clay

Geologic description:
Strongly argillized vesicular andesite containing areas of silicified rock. Initially reported as having rare quartz veins and disseminated Au and Hg (Trujillo and others, 1982), later work (Butherus, 1984) showed Au and Hg to be limited to a vertical fault or shear that localizes reticulated quartz veins.

Alteration:
Propylitic alteration inferred from presence of chlorite (Christie, 1974).

Workings/Exploration:
Christie (1974) reported brief reconnaissance geologic mapping and collection of a few silt samples as part of a porphyry copper evaluation. Trujillo and others (1982) and Butherus (1984) collected 269 samples and did geologic mapping, collecting 45 samples in 1982 and 224 in 1984. Their samples showed gold to 5.6 ppm and silver to 33.2 ppm whereas Christie's (1974) were at background levels.

Age:
Pliocene or younger

Deposit model:
Epithermal gold vein, hot springs gold-silver, Hot spring disseminated gold (Silberman and Berger, 1985).

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992)
25a, 25d

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:
Good example of how color anomaly evaluation focused on copper porphyry mineralization (Christie, 1974) might miss epithermal gold vein type mineralization.

References:
Christie, 1974; Trujillo and others, 1982; Butherus, 1984; Silberman and Berger, 1985

Primary reference: Butherus, 1984

Reporter: Frederic Wilson

Reporter affiliation: USGS

Last report date: 5/09/94

Site: Unnamed

Type: Occurrence

ARDF no. CB003

Latitude: 55.20830 **Quadrangle:** CB A-1

Longitude: 162.05330

Location description and accuracy:
Approximate location is west of Volcano Bay.

Commodities:
Main: Cu **Other:**

Ore minerals:

Gangue minerals:

Geologic description:
Altered zones associated with Tertiary plutons; disseminated sulfides, porphyry-type deposit (MacKevett and Holloway, 1977).

Alteration:

Workings/Exploration:

Age:

Deposit model:

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992)

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

References:
MacKevett and Holloway, 1977, p. 9, no. 13

Primary reference: MacKevett and Holloway, 1977

Reporter: G.D. DuBois

Reporter affiliation: USGS

Last report date: 3/22/91

Site: Volcano Bay

Type: Occurrence

ARDF no. CB004

Latitude: 55.22830 **Quadrangle:** CB A-1

Longitude: 162.09670

Location description and accuracy:
Approximate location is west of head of Volcano Bay. Anomaly no. 55 of Christie (1974) described as 4 mi (6.4 km) north of Captain Harbor, west of Volcano Bay. Also occurrence no. 12 of MacKevett and Holloway (1977, p. 9).

Commodities:
Main: Ag, Au **Other:** Zn

Ore minerals: Pyrite

Gangue minerals:

Geologic description:
Color anomaly 12,000 ft by more than 5,000 ft (3,600 m by 1,500+ m) localized around a number of medium-grained granodiorite dikes and a 2,000 by 2,000+ ft (600 by 600+ m) granodiorite plug. Granodiorite intrudes andesite flows and volcaniclastic rocks of the Belkofski(?) Formation.

Alteration:
Granodiorite in general is moderately propylitically altered, and contains traces of disseminated pyrite. Locally, granodiorite is completely propylitically altered, having up to 4 percent pyrite either in disseminated form or in fracture fillings. Although andesitic country rocks generally are not altered, they locally contain zones of intense alteration (destruction of feldspars and mafic minerals) up to 200' (60 m) wide containing as much as 5 percent pyrite.

Workings/Exploration:
Brief reconnaissance mapping and 15 soil and silt samples (Christie, 1974). Sample results showed generally low copper and molybdenum, zinc to 109 ppm, silver to 2.2 ppm, and gold to 0.2 ppm. Christie (1974) reported covered area to west of anomaly was large enough to hide a porphyry system but lack of copper mineralization makes possibility unlikely.

Age:
Miocene or younger

Deposit model:
Polymetallic vein, epithermal gold vein

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992)
22c, 25

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:
Interpretation of andesitic host rocks as Belkofski Formation is based on the reporters (F.H. Wilson) knowledge of the area and not on Christie's(1974) or MacKevett and Holloway's (1977) reports.

References:
Christie, 1974; MacKevett and Holloway, 1977

Primary reference: Christie, 1974

Reporter: G.D. DuBois, F.H. Wilson

Reporter affiliation: USGS

Last report date: 5/09/94

Site: Mt. Dutton

Type: Occurrence

ARDF no. CB005

Latitude: 55.16670 **Quadrangle:** CB A-1

Longitude: 162.25670

Location description and accuracy:
Approximate location is about 4 km south of the summit of Mt. Dutton. Probably same location as anomaly no. 57 of Christie (1974), described as 2 mi (3.2 km) due north of King Cove landing strip. Also, no. 10 of MacKevett and Holloway (1977, p. 9).

Commodities:
Main: Ag, Cu **Other:** Au, Pb, Zn

Ore minerals: Pyrite

Gangue minerals:

Geologic description:
Two color anomalies 200 by 400 ft and 3,000 by 1,200 ft (60 by 120 and 900 by 360 m) in hornfelsed volcanic rocks cut by rare diorite dikes (Christie, 1974). Pyrite content (0 to 8 percent) is highest in fractured rocks, although most pyrite is disseminated rather than fracture-controlled. Diorite dikes are only weakly altered and are not mineralized. Butherus (1979) reported that the color anomalies south and east of Mt. Dutton consist of altered, pyritic andesite containing quartz and calcite veins.

Alteration:
Christie (1974) reported contact metamorphic effects and weak propylitic alteration.

Workings/Exploration:
Christie (1974) reported brief reconnaissance geologic mapping and collected silt samples, none of which showed anomalies in copper, molybdenum, zinc, silver, or gold. Butherus (1979) reported rock and pan concentrate samples slightly anomalous in copper (130 ppm), lead (300 ppm), zinc (600 ppm), and silver (3.2 ppm).

Age:
Miocene or younger

Deposit model:
Porphyry copper, polymetallic vein, epithermal gold vein

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992)
17, 22c, 25

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:
Reported quartz veining (Butherus, 1979) suggest possibility of epithermal gold vein or polymetallic vein type mineral deposits.

References:
Christie, 1974; MacKevett and Holloway, 1977; Butherus and others, 1979

Primary reference: Butherus and others, 1979

Reporter: G.D. DuBois, F.H. Wilson

Reporter affiliation: USGS

Last report date: 5/09/94

Site: Unnamed

Type: Occurrence

ARDF no. CB006

Latitude: 55.10830 **Quadrangle:** CB A-2

Longitude: 162.35000

Location description and accuracy:
Approximate location is near tidewater at east end of Lenard Harbor. Anomaly no. 72 of Christie (1974). See also CB009, Lenard Harbor.

Commodities:
Main: Ag, Au **Other:** Hg

Ore minerals:

Gangue minerals:

Geologic description:
Christie (1974) reported a 200 by 300 ft (60 by 90 m) color anomaly, exposed on a creek bed, that is due to irregularly distributed disseminated pyrite, not apparently related to any intrusive bodies. Country rocks are hornfelsed and silicified volcanic rocks, possibly dacite.

Alteration:
The only alteration reported is silicification.

Workings/Exploration:
Brief reconnaissance mapping was reported by Christie (1974, source of geologic description), who also collected a few silt samples. The only anomalies were silver at up to 1.7 ppm and gold to 0.01 ppm. Butherus and others (1979) did brief reconnaissance for gold around Lenard Harbor, and found elevated mercury over a broad area.

Age:
Pliocene or younger

Deposit model:
Epithermal gold vein, polymetallic vein

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992)
25, 22

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

References:
Christie, 1974; MacKevett and Holloway, 1977; Butherus and others, 1979

Primary reference: Christie, 1974

Reporter: G.D. DuBois, F.H. Wilson

Reporter affiliation: USGS

Last report date: 5/09/94

Site: Unnamed

Type: Occurrence

ARDF no. CB007

Latitude: 55.05000 **Quadrangle:** CB A-1

Longitude: 162.25000

Location description and accuracy:
Approximate location is between King Cove spit and Slavna Point, 2 mi (3.2 km) east of King Cove. Anomaly no. 70 of Christie (1974).

Commodities:
Main: Ag, Au **Other:** Zn

Ore minerals:

Gangue minerals:

Geologic description:
Christie (1974) described a color anomaly associated with a weak gossan developed at the contact of a quartz diorite pluton with volcanic rocks of the Belkofski Formation. Volcanic rocks include andesitic crystal tuffs and flows. The area of gossan is a maximum of 5,000 by 3,000 ft (1,500 by 900 m) and shows disseminated pyrite mineralization, generally in trace amounts, but locally as high as 2 percent. Approximately half of the pyrite is fracture controlled, resulting in local zones of higher pyrite content.

Alteration:
Propylitic and argillic alteration reported along with weak leaching.

Workings/Exploration:
Brief reconnaissance geologic mapping and a few soil and silt samples. Gold, silver, and zinc were slightly anomalous, at 0.02, 1.4, and 104 ppm, respectively. Copper and molybdenum were at background levels.

Age:
Pliocene or younger

Deposit model:
Epithermal gold vein

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992)
25

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:
In Christie's (1974) evaluation, this occurrence had no sufficiently large covered area to hide a porphyry system and no copper mineralization was suggested.

References:
Christie, 1974; MacKevett and Holloway, 1977

Primary reference: Christie, 1974

Reporter: G.D. DuBois, F.H. Wilson

Reporter affiliation: USGS

Last report date: 5/13/94

Site: Unnamed

Type: Occurrence

ARDF no. CB008

Latitude: 55.02830 **Quadrangle:** CB A-1

Longitude: 162.26660

Location description and accuracy:
Approximate location is near the tip of Bold Cape, east of King Cove. Anomaly no. 59 of Christie (1974).

Commodities:
Main: Ag **Other:**

Ore minerals: Pyrite, pyrrhotite

Gangue minerals:

Geologic description:
Color anomaly 3,000 by 2,000 ft (900 by 600 m), elongate along a northeast trend. Country rocks are marine clastic sedimentary rocks and andesite flows and breccias cut by diorite and feldspar porphyry dikes. Pyrite is disseminated in weakly altered diorite dikes and occurs along fractures and disseminated in the country rocks.

Alteration:
Propylitic and local quartz-sericite alteration.

Workings/Exploration:
Brief reconnaissance mapping and a few silt samples reported by Christie (1974). Moderate silver to 1.9 ppm, otherwise background levels for copper, molybdenum, zinc, and gold.

Age:
Miocene or younger

Deposit model:
Epithermal gold vein, polymetallic vein

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992)
22c, 25

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

References:
Christie, 1974; MacKevett and Holloway, 1977

Primary reference: Christie, 1974

Reporter: G.D. DuBois, F.H. Wilson

Reporter affiliation: USGS

Last report date: 5/09/94

Site: Lenard Harbor

Type: Occurrence

ARDF no. CB009

Latitude: 55.10830 **Quadrangle:** CB A-2

Longitude: 162.34170

Location description and accuracy:
Approximate location is near head of Lenard Harbor. May correspond in part to anomaly no. 58 of Christie (1974), described as northeast of Lenard Harbor in the first north-south valley. See also CB006, Unnamed. Occurrence no. 6 of MacKevett and Holloway (1977, p. 9).

Commodities:
Main: Ag, Au? **Other:** Hg

Ore minerals:

Gangue minerals:

Geologic description:
Christie (1974) reported two 3,000 ft (900 m) in diameter color anomalies resulting from irregularly distributed disseminated pyrite, and apparently not related to any intrusive bodies. Country rocks are pyroclastic volcanic rocks and minor andesite flows and diorite dikes. Pyroclastic rocks having high initial porosity are best pyritized. A few weakly altered diorite dikes having trace disseminated pyrite cut the lower elevation(?) anomaly.

Alteration:
Country rocks show weak propylitic alteration.

Workings/Exploration:
Brief reconnaissance mapping reported by Christie (1974, source of geologic description), who also collected a few silt samples. The only anomaly was silver at up to 1.6 ppm. Butherus and others (1979) did brief reconnaissance for gold near Lenard Harbor, and found elevated mercury over a broad area.

Age:
Pliocene or younger

Deposit model:
Hot-springs gold-silver, epithermal gold vein, polymetallic vein

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992)
25a, 25d, 22

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

References:
Christie, 1974; MacKevett and Holloway, 1977; Butherus and others, 1979

Primary reference: Christie, 1974

Reporter: G.D. DuBois, F.H. Wilson

Reporter affiliation: USGS

Last report date: 5/09/94

Good candidate for further evaluation as an epithermal gold vein system....

Site: Unnamed

Type: Occurrence

ARDF no. CB010

Latitude: 55.08330 **Quadrangle:** CB A-1

Longitude: 162.33330

Location description and accuracy:
Approximate location is 2 mi (3.2 km) northwest of northwest shore of King Cove Lagoon. Anomaly no. 73 of Christie (1974) and no. 5 of MacKevett and Holloway (1977, p. 9).

Commodities:
Main: Ag, Au **Other:** Mo, Zn

Ore minerals:

Gangue minerals:

Geologic description:
3,000 by 6,000 ft (900 by 1,800 m) color anomaly due to weathering of disseminated pyrite in dacite and quartz diorite. In the dacite, pyrite occurs in small cavities along with clots of epidote and chlorite. The quartz diorite also contains about 1 percent pyrite in fractures. Numerous thin breccia zones cross-cut the quartz diorite, and contain highly leached and altered fragments in a black, finely ground pyritiferous matrix. One 4" (10 cm) thick, barren quartz vein was noted.

Alteration:
Propylitic alteration, as evidenced by presence of epidote and chlorite; also silicification.

Workings/Exploration:
Brief reconnaissance mapping and sampling reported by Christie (1974). One sample of the pyritiferous matrix of a breccia zone yielded 0.03 ppm gold and 2.7 ppm silver. Other samples from the color anomaly yielded up to 3.8 ppm silver, molybdenum to 15 ppm, and zinc to 127 ppm.

Age:
Pliocene or younger

Deposit model:
Epithermal gold vein

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992)
25

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:
Good candidate for further evaluation as an epithermal gold vein system, rather than a copper porphyry as was done by Christie (1974).

References:
Christie, 1974; MacKevett and Holloway, 1977

Primary reference: Christie, 1974

Reporter: G.D. DuBois, F.H. Wilson

Reporter affiliation: USGS

Last report date: 5/13/94

Site: Unnamed

Type: Occurrence

ARDF no. CB011

Latitude: 55.04500 **Quadrangle:** CB A-2

Longitude: 162.38670

Location description and accuracy:
Approximate location is along shoreline east of Vodapoini Point and west of King Cove.

Commodities:
Main: Cu **Other:**

Ore minerals:

Gangue minerals:

Geologic description:
Altered zone associated with Tertiary subvolcanic pluton. MacKevett and Holloway (1977) suggest porphyry-type deposit.

Alteration:

Workings/Exploration:

Age:

Deposit model:
Porphyry?

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992)
17?

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

References:
MacKevett and Holloway, 1977, p. 9, no. 4

Primary reference: MacKevett and Holloway, 1977

Reporter: G.D. DuBois

Reporter affiliation: USGS

Last report date: 3/22/91

Site: Unnamed

Type: Occurrence

ARDF no. CB012

Latitude: 55.05830 **Quadrangle:** CB A-3

Longitude: 162.70000

Location description and accuracy:
Approximate location is 4 mi (6.4 km) northeast of Thinpoint Cove, between Frosty Peak and Thinpoint Lake. Anomaly no. 62 of Christie (1974) and no. 3 of MacKevett and Holloway (1977, p. 9).

Commodities:
Main: Ag, Au? **Other:**

Ore minerals: Pyrite

Gangue minerals:

Geologic description:
Christie (1974) reports a 3,000 by 1,000+ ft (900 by 300+ m) color anomaly, elongate to the northeast, in volcanic rocks, mainly agglomerate and flows(?). Pyrite is disseminated and to a minor degree localized in fractures in the volcanic rocks. Maximum total sulfide content is 2 to 3 percent. No intrusive rocks were found.

Alteration:
Possibly propylitic, based on presence of chlorite.

Workings/Exploration:
Brief reconnaissance geologic mapping and collection of a few silt samples reported by Christie (1974). Silver to 1.3 ppm, otherwise background levels for copper, molybdenum, zinc, and gold.

Age:
Pliocene or younger

Deposit model:
Epithermal gold vein, polymetallic vein

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992)
22c, 25

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

References:
Christie, 1974; MacKevett and Holloway, 1977

Primary reference: Christie, 1974

Reporter: G.D. DuBois, F.H. Wilson

Reporter affiliation: USGS

Last report date: 5/09/94

Site: Moffet Point

Type: Occurrence

ARDF no. CB013

Latitude: 55.49170 **Quadrangle:** CB B-2

Longitude: 162.48330

Location description and accuracy:
Beach and dune sands near Moffet Point. Coordinates are for beach between localities of 2 richest samples.

Commodities:
Main: Fe, Ti **Other:**

Ore minerals: Magnetite, franklinite

Gangue minerals:

Geologic description:
Peninsula covered by sand dunes as much as 100 ft. (30 m) high; outer beach broad and smooth. Dunes contain some magnetite. Wind sorting has resulted in erratically distributed magnetite stringers throughout the area. Beach and dune sands are derived from glacial deposits and erosion of a largely volcanic terrain. The sands contain local concentrations of titaniferous magnetite.

Alteration:

Workings/Exploration:
Concentrates from 16 auger holes and shovel samples of beach material (with one exception) contained 10 percent or more titaniferous magnetite; most also contained traces of franklinite. Two samples contained more than 100 lbs iron (45 kg) and 25 lbs TiO2 (11 kg) per cubic yard (0.84 cubic m) of material in place. All others were much lower grade.

Age:

Deposit model:
Shoreline placer titanium

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992)
39c

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

References:
Berryhill, 1963, p. 45-48; Cobb, 1972, MF-441; Cobb, 1973, B 1374; Cobb, 1980, OFR 80-909; MacKevett and Holloway, 1977, p. 9, no. 1

Primary reference: Berryhill, 1963

Reporter: G.D. DuBois, F.H. Wilson

Reporter affiliation: USGS

Last report date: 10/23/92

Site: Unnamed

Type: Occurrence

ARDF no. CB014

Latitude: 55.13330 **Quadrangle:** CB A-1

Longitude: 162.01670

Location description and accuracy:
Approximate location is 4 mi (6.4 km) northwest of Belkofski Point; anomaly no. 61 of Christie (1974).

Commodities:
Main: Ag, Au? **Other:**

Ore minerals: Pyrite

Gangue minerals:

Geologic description:
Christie (1974) reports a 3,000 by 3,000+ ft (900 by 900+ m), elongate to the northeast, color anomaly in volcanic rocks, mainly breccia and flows(?). His interpretation was that alteration was solfataric. No signs of fracture-controlled mineralization, epidote, or intrusive rocks.

Alteration:
Possibly propylitic, based on presence of chlorite. Bleaching reported. Possible silicification? Solfataric(?).

Workings/Exploration:
Brief reconnaissance geologic mapping and collection a few silt samples reported by Christie (1974). Silver to 1.4 ppm and zinc to 99 ppm; otherwise background levels for copper, molybdenum, and gold.

Age:
Pliocene or younger

Deposit model:
Epithermal gold vein, polymetallic vein

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992)
22c, 25

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

References:
Christie, 1974; MacKevett and Holloway, 1977

Primary reference: Christie, 1974

Reporter: G.D. DuBois, F.H. Wilson

Reporter affiliation: USGS

Last report date: 5/09/94

Site: Unnamed

Type: Occurrence

ARDF no. CB015

Latitude: 55.16670 **Quadrangle:** CB A-1

Longitude: 162.23330

Location description and accuracy:
Approximate location is about 2 mi (3.2 km) southeast of Mt. Dutton, near Belkofski Bay. Anomaly no. 71 of Christie (1974) and no. 11 of MacKevett and Holloway (1977, p. 9).

Commodities:
Main: Au? **Other:**

Ore minerals: Pyrite

Gangue minerals:

Geologic description:
Christie (1974) described a color anomaly and associated gossan developed in hornfelsed andesite and dacite east of a contact with a fresh, medium-grained, unpyritized quartz diorite pluton. Gossan forms an oval, roughly 2,000 by 1,200 ft (1,500 by 900 m), but it is not fully delineated. Within the color anomaly, there are several thin breccia zones which are highly leached. Color anomaly is due to the weathering of pyrite, which is disseminated or localized in fractures in concentrations up to 8 percent. Northwest of the gossan, very recent volcanic debris and young flows from Mt. Dutton cover a hidden gossan as evidenced by bright orange seeps and strong iron-oxide staining in creek.

Alteration:
Alteration is absent to weakly propylitic as evidenced by the presence of epidote and chlorite.

Workings/Exploration:
Brief reconnaissance geologic mapping and collection of a few soil and silt samples reported by Christie (1974). Gold, silver, zinc, copper, and molybdenum were at background levels.

Age:
Pliocene or younger

Deposit model:
Epithermal gold vein

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992)
25

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:
Sampling probably not adequate to evaluate for epithermal gold vein mineralization.

References:
Christie, 1974; MacKevett and Holloway, 1977

Primary reference: Christie, 1974

Reporter: G.D. DuBois, F.H. Wilson

Reporter affiliation: USGS

Last report date: 5/13/94

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